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EXAMINER	
REPKO, JASON MICHAEL	
ART UNIT	PAPER NUMBER
2628	

SHORTENED STATUTORY PERIOD OF RESPONSE	MAIL DATE	DELIVERY MODE
3 MONTHS	01/24/2007	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

If NO period for reply is specified above, the maximum statutory period will apply and will expire 6 MONTHS from the mailing date of this communication.

Office Action Summary	Application No.	Applicant(s)	
	10/763,222	KOTAKE ET AL.	
	Examiner	Art Unit	
	Jason M. Repko	2628	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *06 November 2006*.

2a)☒ This action is **FINAL**. 2b)☐ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-4,6,7 and 9-13* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☐ Claim(s) *1-4,6,7 and 9-13* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☒ The drawing(s) filed on *26 January 2006* is/are: a)☒ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____.
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____.

DETAILED ACTION

Claim Rejections - 35 USC § 101

1. 35 U.S.C. 101 reads as follows:

> Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

2. Claims 1-4, 6, 7 and 9-13 are rejected under 35 U.S.C. 101 because the claimed invention is directed to non-statutory subject matter.

3. Claims 1-4, 7, 9, and 10 appear to be to an abstract idea rather than a practical application of the idea. Claims 1-4, 7, 9, and 10 does not result in a physical transformation nor do they appear to provide a useful, concrete and tangible result. Specifically, it does not appear to produce a tangible result because merely computing the positions of annotations and synthesizing images are nothing more than thoughts or computations within a processor. The practical application is not explicitly recited in the claims nor does it flow inherently therefrom. Claim 7 recites "displaying the read actually taken image"; however never makes use of the result of the calculations. Annex 5 of the "Interim Guidelines for Examination of Patent Application for Patent Subject Matter Eligibility" provides guidance with respect to the determination of the patentability of mathematical algorithms. If the "acts" of a claimed process manipulate only numbers, abstract concepts or ideas, or signals representing any of the foregoing, the acts are not being applied to appropriate subject matter. Benson, 409 U.S. at 71-72, 175 USPQ at 676. Thus, a process consisting solely of mathematical operations, i.e., converting one set of number into another set of numbers does not manipulate appropriate subject matter and thus cannot constitute a statutory process.

4. Claims 6 and 11 are directed to computer programs. Computer programs, *per se,* are not in one of the statutory categories of invention (See MPEP § 2106 with regard to computer programs.). Functional descriptive material claimed in combination with an appropriate computer readable medium to enable the functionality to be realized is patent eligible subject matter if it is capable of producing a useful, concrete and tangible result when used in the computer system. However, the control program recited in claims 6 and 11 does not produce a useful, concrete and tangible result when used in the computer system. A process consisting solely of mathematical operations, i.e., converting one set of number into another set of numbers does not manipulate appropriate subject matter and thus cannot constitute a statutory process (see the preceding remarks with respect to claims 1 and 7). Furthermore, the claims are directed to the program itself and not the medium encoded with the program. Therefore, claims 6 and 11 are directed to non-statutory subject matter.

5. Claims 12 and 13 preempt an abstract idea. A claim may not preempt every substantial practical application of an abstract idea, law of nature or natural phenomena because it would in practical effect be a patent on the judicial exceptions itself. Claims 12 and 13 appear to be directed to a generic computing system executing a method.

6. To expedite a complete examination of the instant application, the claims rejected under 35 U.S.C. 101 as non-statutory subject matter are further rejected as set forth below in anticipation of applicant amending the claims to place them within the four categories of invention.

Claim Rejections - 35 USC § 103

7. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

8. The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

9. Claims 1, 3, 6 and 12 are rejected under 35 U.S.C. 103(a) as being unpatentable over Masakatsu Kourogi, Takeshi Kurata, Katsuhiko Sakaue, and Yoichi Muraoka, "A panorama-based technique for annotation overlay and its real time implementation," July 30, 2000, Proceedings of IEEE International Conference on Multimedia and Expo, p. 657-660 (Kourogi et al) in view of U.S. Patent No. 6,064,399 to Teo.

10. With regard to claim 1, Kourogi et al discloses "An information processing method comprising:

a. a viewpoint position / sight line direction determination step of determining a viewpoint position and a sight line direction on a map (*2nd paragraph of section 2: "The referred panoramic image will be switched if necessary as the camera moves around...By tracking which panorama is referred, we can also estimate the position and trajectory of the user. "; Figure 8 shows an Estimation of the user's position; Figure 9 shows Estimation of the user's orientation; Figure 2 shows a map*);

b. a reading step of reading a panoramic image according to the viewpoint position from a storage unit which stores plural panoramic images (*Figure 2 shows "the*

panoramic image used is switched while the user moves"), and cutting out a display image from a storage unit which stores plural panoramic images , and cutting out a display image based on the sight line direction (*1st paragraph of section 3.2: "...a set of four panoramic images were acquired at point[s] A-D in Figure 5..."; Figure 6 shows a set of panoramas; Figure 7 shows output frames that are "cut out" of the panoramic image data; 2nd paragraph of section 2: "The referred panoramic image will be switched if necessary as the camera moves around...By tracking which panorama is referred, we can also estimate the position and trajectory of the user. "; Figures 8 and 9 show estimating the users sight line direction, which is equivalent to position and orientation*), wherein the storage unit stores the plural panoramic images respectively while associated them with routes set on the map (*2nd paragraph of section 1: "Experimental results show that this method can, with low cost PCs locate and orient input frames and display the frames..."; Figure 5 shows a route on a map associated with panoramic image data sets A-D*) ;

c. a combining step of combining an annotation object with the display image based on the calculated display position (*1st paragraph of section 3.3: "In the experiments the user moved along the path A → B → C → D (Figure 5). The output video frames overlaid with annotations are shown in Figure 7, and the user's estimated position and orientation are shown in Figure 8 and 9"*).

11. Although Kourogi et al teaches using the PCs for "locating," "searching" and "compressing" image data, Kourogi et al does not use the language "storing". However, this feature is deemed to be inherent to the PCs disclosed as section 3 shows implementing the

method on a "PC cluster" (section 3.1) and "searching" the set of image data (section 3.3). The Kourogi et al system would be inoperative if the panoramic image data were not stored.

12. Kourogi et al does not expressly disclose "a relative coordinate calculating step of calculating relative coordinates of an annotation object with respect to the route to which the view position corresponds" or a "display position calculating a display position of said annotation object based on the viewpoint position and the relative coordinates of said annotation object."

13. Teo discloses "a relative coordinate calculating step of calculating relative coordinates of an annotation object with respect to the route to which the view position corresponds" (*lines 44-47 of column 8 (emphasis added): "These four vectors all emanate from a viewing position in the center of the scene, and this position is taken to be the origin of a three-dimensional coordinate system. The present invention finds appropriate positive scalars ρ_1, ρ_2, ρ_3 and ρ_4 so that the scaled vectors $\rho_1 v_1$, $\rho_2 v_2$, $\rho_3 v_3$ and $\rho_4 v_4$ form the vertices of a planar parallelogram... "*); "display position calculating step a display position of said annotation object based on the viewpoint position and the relative coordinates of said annotation object" (*lines 31-36 of column 8: "Once the user has positioned the quadrilateral 430 as desired, then the image or video segmented to be composited onto the panorama can be correctly embedded. Specifically, a linear transformation that transforms the rectangular frame of the image or video onto the frame of the planar parallelogram is determined."; lines 19-20 of column 10: "The resulting (θ,ϕ) pairs map directly into pixel locations in the digital panorama."*); and "a combining step of combining an annotation object with the display image based on the calculated display position" (*lines 34-48 of column 7: " Image portion 310 is corrected for view perspective, and as such appears natural.*

The embedded wall picture 310, being an integral part of the panorama, is also corrected for view perspective."; Figure 3)

14. At the time of the invention, it would have been obvious to a person of ordinary skill in the art to incorporate "a relative coordinate calculating step," "display position calculating step," as taught by Teo in the system disclosed by Kourogi et al. The motivation for doing so would have been to improve the aesthetic quality of the annotated images, as the method disclosed by Teo makes inserted graphic data appear "natural" to the user. Therefore, it would have been obvious to combine Teo with Kourogi et al to obtain the invention specified in claim 1.

15. With regard to claim 3, Kourogi et al discloses "each said route is defined by segment points ends thereof (*figure 5 shows a route with segment points A-D*). Kourogi et al does not expressly disclose "said relative coordinate calculating step sets one segment point of the route to which the view position corresponds as the origin, and sets said route as an x axis." Teo discloses "said relative coordinate calculating step sets one segment point of the route to which the view position corresponds as the origin (*lines 44-47 of column 8 (emphasis added): "These four vectors all emanate from a viewing position in the center of the scene, and this position is taken to be the origin of a three-dimensional coordinate system."*). Teo discloses a y-axis in the vertical direction (*lines 44-46 of column 9: "In the ensuing description a frame of reference is used in which the second of the three Cartesian coordinates, the y-coordinate, points in the vertical direction."*). One of ordinary skill in the art would recognize that the Cartesian coordinate system recited in lines 44-46 of column 9 uses three perpendicular axes x, y and z. At the time of the invention, it would have been obvious to a person of ordinary skill in the art to set the route as the x-axis in the system and method disclosed by the combination of Kourogi et al

and Teo. One of ordinary skill in the art would have been motivated to do so since the user is permitted to move in the horizontal direction in the panoramic image viewer disclosed Kourogi et al and the route would naturally correspond to a horizontal axis. Therefore, it would have been obvious to further modify the combination of Kourogi et al and Teo to obtain the invention specified in claim 3.

16. Claim 6 recites the limitations of claim 1 as a "control program for causing a computer to execute a information processing method." As previously shown, the combination of Kourogi et al and Teo shows the limitations recited in claim 1. Furthermore, Kourogi et al discloses a "control program stored on a computer-readable medium for causing a computer to execute a information processing method" (*section 3: "We implemented our method as software running on a PC cluster and evaluated it in experiments..."*).

17. Claim 12 recites the limitations of claim 1 as a "an image reproduction apparatus." As previously shown, the combination of Kourogi et al and Teo shows the limitations recited in claim 1. Furthermore, Kourogi et al "an image reproduction apparatus" (*section 3: "We implemented our method as software running on a PC cluster and evaluated it in experiments which a user was equipped with a wearable display, a wearable camera, and a wearable computer."*).

18. Claims 2 and 4 are rejected under 35 U.S.C. 103(a) as being unpatentable over Masakatsu Kourogi, Takeshi Kurata, Katsuhiko Sakaue, and Yoichi Muraoka, "A panorama-based technique for annotation overlay and its real time implementation," July 30, 2000, Proceedings of IEEE International Conference on Multimedia and Expo, p. 657-

660 (Kourogi et al) in view of U.S. Patent No. 6,064,399 to Teo in view of U.S. Patent No. 6,563,529 to Jongerius.

19. With regard to claim 2, Kourogi et al discloses "a two-dimensional map" in Figure 2 and Figure 5. The combination of Kourogi et al and Teo does not expressly disclose the map is an image. Jongerius discloses a panoramic image from a viewpoint on a given map displayed along with an image of the two-dimensional map image (*Figure 4; lines 17-22 of column 5: "As will be explained, detailed field of view 40 shows a new area of the panoramic view of FIG. 1 slightly to the left of the view of FIG. 2, while map 38 shows a new highlighted view area 36, rotated slightly counter-clockwise (CCW) from view area 34 of FIG. 2."*).

20. At the time of the invention, it would have been obvious to a person of ordinary skill in the art to incorporate a two-dimensional map image as disclosed by Jongerius in the method and system disclosed by Kourogi et al. The motivation for doing so would have been to provide the user with a better understanding of the area being viewed. Therefore, it would have been obvious to combine Kourogi et al and Teo with Jongerius to obtain the invention specified in claim 2.

21. With regard to lines 1-5 of claim 4, Teo discloses said relative coordinate calculating step acquires observation directions of said annotation object, and calculates the relative coordinates of said annotation object from the observation direction (*Figure 5; lines 44-47 of column 8 (emphasis added): "These four vectors all emanate from a viewing position in the center of the scene, and this position is taken to be the origin of a three-dimensional coordinate system. The present invention finds appropriate positive scalars ρ_1, ρ_2, ρ_3 and ρ_4 so that the scaled vectors $\rho_1 v_1$, $\rho_2 v_2$, $\rho_3 v_3$ and $\rho_4 v_4$ form the vertices of a planar parallelogram..."; lines 31-36 of column 8: "Once the user has positioned the quadrilateral 430 as desired, then the image or video*

segmented to be composited onto the panorama can be correctly embedded. Specifically, a linear transformation that transforms the rectangular frame of the image or video onto the frame of the planar parallelogram is determined."; lines 19-20 of column 10: "The resulting (θ,ϕ) pairs map directly into pixel locations in the digital panorama."). Teo does not expressly disclose doing so "at respective segment points." Kourogi et al disclose calculating the position of annotation objects at respective segment points (*1st paragraph of section 3.3: "In the experiments the user moved along the path A → B → C → D (Figure 5). The output video frames overlaid with annotations are shown in Figure 7, and the user's estimated position and orientation are shown in Figure 8 and 9"*). At the time of the invention, it would have been obvious to a person of ordinary skill in the art to apply the method disclosed by Teo at the respective segment points in Kourogi et al. The motivation for doing so would have been to improve the aesthetic quality of the annotated images, as the method disclosed by Teo makes inserted graphic data appear "natural" to the user.

22. With regard to lines 6 and 7 of claim 4, Kourogi et al discloses allowing "the user's camera to move around the environment" (see Figure 2.4) and setting an observation direction (see Figures 8 and 9); however, Kourogi et al does not expressly disclose "said information processing method further comprises a setting step of manually setting the observation directions at the segment points by using a GUI (graphical user interface)." Jongerius discloses said information processing method further comprises a setting step of manually setting the observation directions by using a GUI (graphical user interface) (*Figures 4-6 show a GUI; lines 59-65 of column 5: "As stated, movement of the field of view can be effected by dragging the cursor in the detailed view of FIG. 2, or in the detailed view window 40 of FIG. 4. Movement of*

the field of view can also be effected by clicking and dragging the cursor in the map of FIG. 3 or map window 38 of FIG. 4. I.e., the user would position the cursor anywhere in the map of FIG. 3, or anywhere in map window 38 of FIG. 4.").

23. At the time of the invention, it would have been obvious to a person of ordinary skill in the art to incorporate a GUI as disclosed by Jongerius in the system and method disclosed by Kourogi et al. The motivation for doing so would have been to allow the user to intuitively control the system. Therefore, it would have been obvious to further modify the combination of Kourogi et al and Teo with Jongerius to obtain the invention specified in claim 4.

24. **Claims 7, 11 and 13 are rejected under 35 U.S.C. 103(a) as being unpatentable over U.S. Patent No. 6,563,529 to Jongerius in view of Masakatsu Kourogi, Takeshi Kurata, Katsuhiko Sakaue, and Yoichi Muraoka, "A panorama-based technique for annotation overlay and its real time implementation," July 30, 2000, Proceedings of IEEE International Conference on Multimedia and Expo, p. 657-660 (Kourogi et al).**

25. With regard to claim 7, Jongerius discloses "an information processing method used in an image reproduction apparatus for achieving walk-through in a virtual space represented by using an actually taken image (*lines 30-34 of column 5: " This will cause the portion of the panoramic image of FIG. 1 shown in FIG. 2 to change and move, just as if the user actually stood at location 30 and turned to the right or left."*), said method comprising the steps of:

d. reading the actually taken image from a storage unit which stores plural actually taken images respectively (*lines 16-19 of column 7: "Then a 360° panoramic image, such as the one of FIG. 1, is installed on the computer's hard disk in the working directory under the name panoramic.jpg, in JPEG format."*) being made correspondent to a map,

and displaying the read actually taken image (*lines 44-49 of column 2: "...to provide such a viewer in which the detailed image and the map image are never be out of sync because any change in the detailed image is immediately reflected in the map image, and any change in the map image is immediately reflected in the detailed image..."*).

26. Jongerius does not expressly disclose "synthesizing an annotation image to the actually taken image" or "setting an annotation display position in the displayed actually taken image based on a manual instruction; and calculating an annotation display position of another actually taken image located between the plural actually taken images to which the annotation display positions have been set respectively, based on the annotation display portions respectively set in the plural actually taken images.

27. Kourogi et al discloses "synthesizing an annotation image to the actually taken image" and "setting an annotation display position in the displayed actually taken image based on a manual instruction (*2nd paragraph of section 1: "The proposed method uses (1) a set of panoramic images acquired at various points in the environment, (2) annotations attached to the panoramas and (3) neighborhood relationships between panoramas as prior knowledge about the environment."; 1st paragraph of section 2 (emphasis added): "Our approach uses a panoramic image to which annotations are manually attached..."; 4th paragraph of section 3.1: "...we used a small CCD camera to capture input video frames..."*); and calculating an annotation display position of another actually taken image located between the plural actually taken images to which the annotation display positions have been set respectively, based on the annotation display portions respectively set in the plural actually taken images (*1st paragraph of section 2: "Our approach uses a panoramic image to which annotations are manually attached*

as the source of information. When an input frame is given, it is aligned with the referred panoramic image. Then, we can map the positions of annotations from the panorama to the frame..."; 1^{st} *paragraph of section 2: " Then, we can map the positions of annotations from the panorama to the frame, and thus can create the frame overlaid with the annotations as shown in Figure 1.")*.

28. At the time of the invention, it would have been obvious to a person of ordinary skill in the art to incorporate synthesizing annotation images as disclosed by Kourogi et al in the method and system disclosed by Jongerius. The motivation for doing so would have been to make the image more informative by providing the user with additional textual or graphical information about a specific object depicted in the panoramic image data. Therefore, it would have been obvious to combine Kourogi et al with Jongerius to obtain the invention specified in claim 7.

29. Claim 11 recites the limitations of claim 7 as a "control program for causing a computer to execute a information processing method." As previously shown, the combination of Jongerius and Kourogi et al shows the limitations recited in claim 7. Furthermore, Jongerius discloses "control program stored on a computer-readable medium for causing a computer to execute a information processing method" (*see line 66 of column 6 through line 15 of column 7*).

30. Claim 13 recites the limitations of claim 7 as a "an image reproduction apparatus." As previously shown, the combination of Jongerius and Kourogi et al shows the limitations recited in claim 7. Furthermore, Jongerius discloses "an image reproduction apparatus" (*see line 66 of column 6 through line 15 of column 7*).

31. **Claims 9 and 10 are rejected under 35 U.S.C. 103(a) as being unpatentable over U.S. Patent No. 6,563,529 to Jongerius in view of Masakatsu Kourogi, Takeshi Kurata,**

Katsuhiko Sakaue, and Yoichi Muraoka, "A panorama-based technique for annotation overlay and its real time implementation," July 30, 2000, Proceedings of IEEE International Conference on Multimedia and Expo, p. 657-660 (Kourogi et al) in view of Erwin Pang, and Dimitrios Hatzinakos, "An Efficient Implementation of Affine Transformation Using One-Dimensional FFT's," April 1997, Proceedings of 1997 IEEE International Conference on Acoustics, Speech, and Signal Processing, Vol. 4, p. 2885-2888 (Pang et al).

32. With regard to claims 9 and 10, Kourogi et al discloses in the first paragraph of section 2.1:

> *We estimate image alignment parameters between an input frame and a referred panoramic image, by using a fast and robust gradient-based method that can find affine or projective parameters of image alignment between images. We use affine model because of its stability of estimation.*

33. The combination of Jongerius and Kourogi et al does not expressly disclose "said calculating step acquires the annotation display position of another actually taken image, by interpolating the annotation display positions respectively set in the plural actually taken images wherein the interpolation is non-linear interpolation" as recited in claims 9 and 10. Pang et al teaches in the first paragraph of section 1 (*emphasis added*):

> *Geometrical transformation of digital image is a common application in image processing [l] [2]. The uniformly distributed samples on a two-dimensional plane, after being transformed, will be misaligned with the reference grid pattern which are only*

defined for discrete locations. An interpolation of these transformed pixels is thus needed to recover those on the grid points.

34. Pang et al further discloses, "Cubic interpolation [11] is more accurate since it uses more [neighboring] points for resampling" (*1st paragraph of section 4.1*).

35. At the time of the invention, it would have been obvious to a person of ordinary skill in the art to incorporate non-linear interpolation for determining the annotation position as taught by Pang et al in the system disclosed by Kourogi et al, and to do so from among plural non-linear curves previously held. The motivation for doing so would have been to "recover the grid points in the image" after the affine transformation is applied, as suggested by Pang et al, in a computationally efficient manner. Therefore, it would have been obvious to combine Pang et al with Kourogi et al to obtain the invention specified in claims 9 and 10.

Response to Arguments

36. Applicant's arguments with respect to the pending claims have been considered but are moot in view of the new ground(s) of rejection. It should be noted that in the Office action dated 6/6/2006 claims 1-12 were rejected under 35 U.S.C. 101.

Conclusion

37. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Ismo Rakkolainen, Jani Timmerheid, Teija Vainio, "A 3D City Info for Mobile Users," November 9, 2000, Proceedings of the 3rd International Workshop on Intelligent Interactive Assistance and Mobile Multi-Media Computing, p. 115-121 shows a three-dimensional view and a corresponding map view. U.S. Patent No. 6,968,973 to Uyttendaele et al discloses an annotated image-based virtual tour.

38. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Jason M. Repko whose telephone number is 571-272-8624. The examiner can normally be reached on Monday through Friday 8:30 am -5:00 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Ulka Chauhan can be reached on 571-272-7782. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

JMR

ULKA CHAUHAN
SUPERVISORY PATENT EXAMINER